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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/977,846	11/25/1997	JOHN O. RYAN	549222000101	3572
25226 7590 07/08/2008 MORRISON & FOERSTER LLP 755 PAGE MILL RD PALO ALTO, CA 94304-1018				
EXAMINER				
BORISSOV, IGOR N				
ART UNIT		PAPER NUMBER		
3628				
MAIL DATE		DELIVERY MODE		
07/08/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

08/977,846

Applicant(s)

RYAN, JOHN O.

Examiner

Igor N. Borissov

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 33-90 is/are pending in the application.
- 4a) Of the above claim(s) 65-90 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 33-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 02/28/2008; 02/07/2008; 12/06/2007

DETAILED ACTION

Response to Amendment

Amendment received on 02/07/2008 is acknowledged and entered. Claim 58 has been amended. New claims 62-90 have been added. Claims 1 and 33-90 are currently pending in the application.

Rule 130, 131 or 132 Affidavits of 02/07/2008 have been considered.

Examiner's statement

This application contains claims directed to the following patentably distinct species of the claimed invention:

Species 1: Claims 33-57, 59-64, drawn to a receiving device

Species 2: Claims 65, 66, 75, 78, 86-88, 90, drawn to a tuning circuitry

Species 3: Claims 70-74, 77, 80, 81, and 85, drawn to encryption techniques

Species 4: Claims 82-84 and 89, drawn to a memory arrangement

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, new Claims 65-90 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Upon the allowance of a generic claims (claims 1 and 58), Applicant will be entitled to consideration of claims to additional species which are written in dependent

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form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. Claims 1, 33-37, 39-40, 51, 58-62, 69 are rejected under 35 U.S.C. 102(a) as being anticipated by Yoshio et al (JP4310631).

As per Claim 1.

Yoshio et al ('631) discloses:

a tuner for receiving a broadcast signal, see page 23, line 12;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see page 23, line 13;

a user interface for providing a set of menus describing the database, and for accepting selections from the set of menus, see page 23, line 25;

a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see page 25, lines 24-25;

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 23, lines 21-23.

As per Claim 33.

Yoshio et al ('631) further discloses the memory stores the entire database, see page 23, lines 19-26.

As per Claim 34.

Yoshio et al ('631) further discloses the memory comprises a combination of volatile RAM memory and a non-volatile memory, see page 27, lines 15-19 and page 28, lines 2-26.

As per Claim 35.

Yoshio et al ('631) further discloses the non-volatile memory is an optical disk, see page 28, lines 2-26.

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As per Claim 36.

Yoshio et al ('631) further discloses the received audio data has been converted from analog form to digital form, see page 24, lines 23-25.

As per Claim 37.

Yoshio et al ('631) further discloses the received audio data is digitized and has been compressed, see page 24, lines 23-25.

As per Claim 39.

Yoshio et al ('631) further discloses the received data has been converted from analog form to digital form, see page 26, lines 17-19.

As per Claim 40.

Yoshio et al ('631) further discloses the received data has been converted to voice data by a voice synthesizer, see page 26, lines 17-19.

As per Claim 51.

Yoshio et al ('631) further discloses a hierarchy for the database, see page 23, lines 25-27.

As per Claim 58.

Yoshio et al ('631) discloses:

- receiving the information, see page 27, lines 9-15;
- storing the received information in a database, see page 23, lines 10-13;
- providing a set of menus describing the database, see page 23, lines 25-26;
- accepting selections from the set of menus, see page 23, lines 14-16;
- providing the selected data in digital form, see page 24, line 25; and
- converting the selected data to an analog signal, see page 28, lines 2-4.

As per Claim 59.

Yoshio et al ('631) further discloses the received information is transmitted by a broadcast signal, see page 27, lines 13-15.

As per Claim 60, 61.

Yoshio et al ('631) further discloses the stored content includes the content of at least one entire program, see page 26, lines 14-20.

As per Claim 62.

Yoshio et al ('631) discloses:

- a tuner for receiving a broadcast signal, see page 23, line 12;
- a memory coupled to the tuner for storing data in the received broadcast signal in a database, see page 23, line 13.

The content of the data, including continuous updates, cannot affect the method

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steps performed, therefore not given patentable weight. MPEP 2106 (C) states: "Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.

As per Claim 69.

See reasoning applied to claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 38, 41-44, 52, 54-56, 67 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshio et al ('631) in view of De Bey (WO 99/03112).

As per Claim 38.

Yoshio et al ('631) do not disclose the received audio data has been encrypted. De Bey ('112) teaches the received audio data is encrypted, see page 11, lines 30-38, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to encrypt the data transmission for the benefit of increased security of data transmission.

As per claims 41, 67 and 76.

Yoshio et al ('631) do not disclose a decryptor for decrypting the data.

De Bey ('112) teaches data encrypted, see page 11, lines 30-31, and compressed, see page 11, line 12, and further comprising a decryptor for decrypting, see page 11, lines 31-32 for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of increased security of data transmission.

As per Claim 42.

Yoshio et al ('631) do not disclose a decryptor for decrypting the data.

De Bey ('112) further discloses a decompression algorithm to decompress

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data that has been compressed at a transmitter prior to being broadcast, see figure 2 (40, 50), and page 111, lines 12-15, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of increased security of data transmission.

As per Claim 43.

Yoshio et al ('631) do not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of increased security of data transmission.

As per Claim 44.

Yoshio et al ('631) do not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, states that the key can be

included as a prefix to the data packet received by the receiver 40, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of increased security of data transmission.

As per Claim 52.

Yoshio et al ('631) do not disclose the memory stores data received in a random access memory up to the capacity of the random access memory before transmitting said data to one of a disk medium or tape medium.

De Bey ('112) teaches the memory stores the data received in a random access memory up to the capacity of the random access memory before transmitting said data to one of a disk medium or tape medium, see page 7, lines 23-25 for the benefit of storing the data without exceeding ram buffer capacity.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to store data received in a random access memory up to the capacity of the random access memory before transmitting said data to a disk medium as taught by De Bey ('112) for the benefit of storing the data without exceeding ram buffer capacity.

As per Claim 54.

Yoshio et al ('631) further discloses disk medium is a magnetic disk, see page 27, lines 18-19.

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As per Claim 55.

Yoshio et al ('631) further discloses disk medium is a magnetic-optical disk, see page 27, lines 18-19.

As per Claim 56.

Yoshio et al ('631) further discloses disk medium is an optical disk, see column 6, line 28-39.

3. Claims 45-50, 57 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshio et al ('631) in view of Official Notice.

As per Claim 45.

Yoshio et al ('631) does not disclose the user interface is voice activated.

Official Notice is taken that speech recognition is old and well known as shown in Takahashi (4,682,368), column 2, lines 11-60 for the benefit of hands free operation of the device.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a voice activated user interface as taught by Takahashi (4,682,368) for the benefit of hands free operation of the device.

As per Claim 46.

Yoshio et al ('631) does not disclose:

a manual input device adapted to be mountable on an automobile steering wheel; and
a link from the manual input device to the controller.

Official Notice is taken that control systems on automobile steering wheels are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 47.

Yoshio et al ('631) does not disclose a control for determining the speed at which the speech output device outputs the analog signal.

Official notice is taken that it is old and well known to determine the speed at which the speech device output the output signal as can be seen in Benbassat et al (4,700,322) column 1, lines 28-50 for the benefit of synchronizing speech with the visualization of messages.

Therefore, it would have been obvious to one of ordinary skill in the art, at the

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time the invention was made to determine the speed at which the speech device output the output signal as taught by Benbassat et al (4,700,322) for the benefit of synchronizing speech with the visualization of messages.

As per Claims 48 and 68.

Yoshio et al ('631) does not disclose the tuner channel skips to tune to a particular transmitter.

Official Notice is taken that it is old and well known to skip channels to get to the desired transmitter, as seen in Whitby et al (GB 2 258 102) page 6, lines 13-21 for the benefit of presetting the device to access a specific transmitter.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to skip channels to get to the desired transmitter, as taught by Whitby et al (GB 2 258 102) for the benefit of presetting the device to access a specific transmitter.

As per Claim 49.

Yoshio et al ('631) does not disclose an amplifier.

Official notice is taken that amplifiers are old and well known to amplify signals sent to speakers as can be seen in Schwob (5,152,011) figure 1 (26) for the benefit of amplifying signals sent to speakers.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use an amplifier as taught by Schwob ('011) for the benefit of amplifying signals sent to speakers.

As per Claim 50.

Yoshio et al ('631) further discloses mounting the reproduction device on a vehicle, see page 28, lines 6-7, but does not disclose connecting the receiving system to an automobile radio set.

Official Notice is taken that control systems on automobile are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 57.

Yoshio et al ('631) does not disclose a speed of transmission of the data in the broadcast signal is varied to most efficiently use the available bandwidth.

Official Notice is taken that it is old and well known in the network arts to vary transmission speeds to most efficiently use the available bandwidth.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to vary the transmission of the broadcast signal to most efficiently use the available bandwidth.

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4. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshio et al ('631) in view of De Bey (WO 99/03112) and further in view of Official Notice.

As per Claim 53.

Yoshio et al ('631) further discloses various digital media, see page 23, line 4 and page 27, line 18, but does not disclose digital audio tape.

Official Notice is taken that it is old and well known to use standardized media for recording for the benefit of maximizing public acceptance of the product.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to utilize digital audio tape or any other standard media for recording for the benefit of maximizing public acceptance of the product.

5. Claims 1, 33-44, 52, 54-56, 58-62, 67, 69 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey (WO 99/03112) in view of Yoshio et al ('631).

As per Claim 1.

De Bey ('112) discloses:

a tuner for receiving a broadcast signal, see figure 2 (40) and page 10 lines 26-30 and page 11, lines 4-5;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see figure 2 (42, 42);

a user interface for interacting with the database, see figure 2 (keypad 54, TV 44 provides user input to select program stored in memories 42, 46);

a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see figure 2 (52) and page 9, lines 10-11, page 19, lines 32-33;

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 8, line 4.

While De Bey teaches that the user interface provides an access to the program stored in the database, De Bey does not explicitly teach that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus.*

Yoshio et al ('631) discloses:

a tuner for receiving a broadcast signal, see page 23, line 12;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see page 23, line 13;

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a user interface for providing a set of *menus describing the database, and for accepting selections from the set of menus*, see page 23, line 25;

a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see page 25, lines 24-25;

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 23, lines 21-23.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify De Bey to include that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*, as disclosed in Yoshio et al, because it would advantageously allow to organize the programs by the interest by structuring them into a plurality of hierarchies such as children menus or grandchildren menus (Yoshio et al, page 23, line 25 – page 24, line 1), thereby allowing the user to select the desired channel at a glance without memorizing the program code.

As per Claim 33.

De Bey ('112) further discloses the memory stores the entire database, see page 7, lines 1-33 and page 11, lines 12-15.

As per Claim 34.

De Bey ('112) further discloses the memory comprises a combination of volatile RAM and non-volatile memory, see page 7, lines 10-33 and page 11, lines 12-15.

As per Claim 35.

De Bey ('112) further discloses non-volatile memories such as ROM, see page 7, lines 10-33 and page 11, lines 12-15.

As per Claim 36.

De Bey ('112) further discloses the received audio data has been converted from analog form to digital form, see page 9, lines 36-38.

As per Claim 37.

De Bey ('112) further discloses the received audio data is digitized and has been compressed, see page 9, lines 36-38.

As per Claim 38.

De Bey ('112) further discloses the received audio data is encrypted, see page 11, lines 30-38.

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As per Claim 39.

While De Bey (122) teaches that the disclosed system provides transmission optimization for either digital or analog information signals, Be Bey does not specifically disclose analog to digital conversion.

Yoshio et al ('631) further discloses the received data has been converted from analog form to digital form, see page 26, lines 17-19 as an old and well known method of reproducing signals.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use the analog to digital conversion of Yoshio et al ('631) as an old and well known method of reproducing signals.

As per Claim 40.

De Bey ('122) does not specifically disclose a voice synthesizing.

Yoshio et al ('631) further discloses the received data has been converted to voice data by a voice synthesizer, see page 26, lines 17-19 as an old and well known method of reproducing voice signals.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use the voice synthesis of Yoshio et al ('631) as an old and well known method of reproducing voice signals.

As per claims 41, 67 and 76.

De Bey ('112) further discloses the data is in digital form, see page 9, line 11, encrypted, see page 11, lines 30-31, and compressed, see page 11, line 12, and further comprising a decryptor for decrypting, see page 11, lines 31-32.

As per Claim 42.

De Bey ('112) further discloses a decompression algorithm to decompress data that has been compressed at a transmitter prior to being broadcast, see figure 2 (40, 50), and page 111, lines 12-15.

As per Claim 43.

De Bey (112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1.

As per Claim 44.

De Bey (112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, states that the key can be included as a prefix to the data packet received by the receiver 40.

As per Claim 52.

De Bey ('112) further discloses the memory stores the data received in a random access memory up to the capacity of the random access memory before transmitting

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said data to one of a disk medium or tape medium, see page 7, lines 23-25.

As per Claim 54.

Yoshio et al ('631) further discloses disk medium is a magnetic disk, see page 27, lines 18-19. The motivation to combine the references would be to utilize standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 55.

Yoshio et al ('631) further discloses disk medium is a magnetic-optical disk, see page 27, lines 18-19. The motivation to combine the references would be to utilize standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 56.

De Bey (112) further discloses optical disk, see page 7, line 27.

As per Claim 58.

See reasoning applied to claim 1.

As per Claim 59.

See reasoning applied to claim 1.

As per Claim 60, 61.

Yoshio et al ('631) further discloses the stored content includes the content of at least one entire program, see page 26, lines 14-20. The motivation to combine the references would be to provide convenience to the user to listen uninterrupted program.

As per Claim 62.

De Bey ('112) discloses:

a tuner for receiving a broadcast signal, see figure 2 (40) and page 10 lines 26-30 and page 11, lines 4-5;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see figure 2 (42, 42). The content of the data, including continuous updates, cannot affect the method steps performed, therefore not given patentable weight. MPEP 2106 (C) states: "Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. Furthermore, updates of a broadcasted program is obvious variation of the broadcasted program.

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As per Claim 69.

See reasoning applied to claim 1.

6. Claims 45-51, 53, 57 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey ('112) in view of Yoshio et al ('631) and further in view of Official Notice.

As per Claim 45.

The combination does not disclose the user interface is voice activated.

Official Notice is taken that speech recognition is old and well known as shown in Takahashi (4,682,368), column 2, lines 11-60 for the benefit of hands free operation of the device.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a voice activated user interface as taught by Takahashi (4,682,368) for the benefit of hands free operation of the device.

As per Claim 46.

The combination does not disclose:

a manual input device adapted to be mountable on an automobile steering wheel; and

a link from the manual input device to the controller.

Official Notice is taken that control systems on automobile steering wheels are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 47.

The combination does not disclose a control for determining the speed at which the speech output device outputs the analog signal.

Official notice is taken that it is old and well known to determine the speed at which the speech device output the output signal as can be seen in Benbassat et al (4,700,322) column 1, lines 28-50 for the benefit of synchronizing speech with the visualization of messages.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to determine the speed at which the speech device output the output signal as taught by Benbassat et al (4,700,322) for the

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benefit of synchronizing speech with the visualization of messages.

As per Claims 48 and 68.

The combination does not disclose the tuner channel skips to tune to a particular transmitter.

Official Notice is taken that it is old and well known to skip channels to get to the desired transmitter, as seen in Whitby et al (GB 2 258 102) page 6, lines 13-21 for the benefit of presetting the device to access a specific transmitter.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to skip channels to get to the desired transmitter, as taught by Whitby et al (GB 2 258 102) for the benefit of presetting the device to access a specific transmitter.

As per Claim 49.

The combination does not disclose an amplifier.

Official notice is taken that amplifiers are old and well known to amplify signals sent to speakers as can be seen in Schwob (5,152,011) figure 1 (26) for the benefit of amplifying signals sent to speakers.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use an amplifier as taught by Schwob ('011) for the benefit of amplifying signals sent to speakers.

As per Claim 50.

The combination does not disclose connecting the receiving system to an automobile radio set.

Official Notice is taken that control systems on automobile are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 53.

The combination does not disclose digital audio tape.

Official Notice is taken that it is old and well known to use standardized media for recording for the benefit of maximizing public acceptance of the product.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to utilize digital audio tape or any other standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 57.

The combination does not disclose a speed of transmission of the data in the broadcast signal is varied to most efficiently use the available bandwidth.

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Official Notice is taken that it is old and well known in the network arts to vary transmission speeds to most efficiently use the available bandwidth.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to vary the transmission of the broadcast signal to most efficiently use the available bandwidth.

7. Claims 1, 33-37, 49, 52, 54-56, 58-61, 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang (5,057,932) in view of Yoshio et al ('631).

As per Claim 1.

Lang ('932) discloses:

- a tuner for receiving a broadcast signal, see figure 3 and column 11, lines 9-40;
- a memory coupled to the tuner for storing data in the received broadcast signal in a database, see figure 3, (13), column 8, lines 38-50 and column 11, line 30 ;
- a user interface for interacting with the database, see column 6, line 53, column 11, lines 3240 and column 8, lines 27-33;
- a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see figure 3 (14);
- a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see figure 3 (12).

Lang does not explicitly teach that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus.*

Yoshio et al ('631) discloses:

- a tuner for receiving a broadcast signal, see page 23, line 12;
- a memory coupled to the tuner for storing data in the received broadcast signal in a database, see page 23, line 13;
- a user interface for providing a set of *menus describing the database, and for accepting selections from the set of menus*, see page 23, line 25;
- a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see page 25, lines 24-25;
- a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 23, lines 21-23.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lang to include that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*, as disclosed in Yoshio et al, because it would advantageously allow to

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organize the programs by the interest by structuring them into a plurality of hierarchies such as children menus or grandchildren menus (Yoshio et al, page 23, line 25 – page 24, line 1), thereby allowing the user to select the desired channel at a glance without memorizing the program code.

As per Claim 33.

Lang ('932) further discloses the memory stores the entire database, see column 8, lines 27-33.

As per Claim 34.

Lang ('932) further discloses the memory comprises a combination of volatile RAM and non-volatile memory, see figure 3 (13, 14).

As per Claim 35.

Lang ('932) further discloses non-volatile memories such as ROM, see figure 3 (14).

As per Claim 36.

Lang ('932) further discloses the received audio data has been converted from analog form to digital form, see figure 3 (A/D, D/A) and column 5, lines 51-53.

As per Claim 37.

Lang ('932) further discloses the received audio data is digitized and has been compressed, see figure 3 (ND, D/A) and column 3, line 51 - column 5, line 50.

As per Claim 49.

Lang ('932) further discloses an amplifier connected to the speech producing sub-system for amplifying the analog signal, see column 11, lines 60-63.

As per Claim 52.

Lang ('932) further discloses a memory stores the data received in a random access memory up to the capacity of the random access memory before transferring said data to one of a disk medium or a tape medium, see column 9, lines 38-56.

As per Claim 54.

Lang ('932) further discloses disk medium is a magnetic disk, see column 6, line 28-39.

As per Claim 55.

Lang ('932) further discloses disk medium is a magnetic-optical disk, see column 6, line 28-39.

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As per Claim 56.

Lang ('932) further discloses disk medium is an optical disk, see column 6, line 28-39.

As per Claim 58.

Lang ('932) discloses:

receiving the information, see figure 3 and column 11, lines 9-40;
storing the received information in a database, see column 11, line 30;
providing a set of menus describing the database, see column 11, lines 32-40
and column 8, lines 27-33;
accepting selections from the set of menus, see column 8, lines 27-33;
providing the selected data in digital form, see column 8, lines 5-26; and
converting the selected data to an analog signal, see column 8, lines 38-50.

As per Claim 59.

Lang ('932) further discloses the received information is transmitted by a broadcast signal, see figure 3.

As per Claim 60, 61.

Yoshio et al ('631) further discloses the stored content includes the content of at least one entire program, see page 26, lines 14-20. The motivation to combine the references would be to provide convenience to the user to listen uninterrupted program.

As per Claim 69.

See reasoning applied to claim 1.

10. Claims 38, 41-42, 67 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang ('932) in view of Yoshio et al ('631) and further in view of Rovira (WO 92/10040).

As per Claim 38.

The combination of Lang ('932) and Yoshio et al ('631) does not disclose that the received audio data has been encrypted.

Rovira ('040) teaches conversion, compression and encryption of data are well known for the benefit of increased speed and security of data transmission, see page 12, lines 5-16.

Therefore, it would have been obvious to one of ordinary skill in the art, at

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the time the invention was made to digitize and encrypt the data transmission for the benefit of increased security of data transmission.

As per Claims 41, 67 and 76.

The combination of Lang ('932) and Yoshio et al ('631) does not disclose a decryptor for decrypting the data.

Rovira ('040) teaches conversion, compression and encryption of data are well known for the benefit of increased speed and security of data transmission, see page 12, lines 5-16 and further a decryptor for decrypting, see page 14, lines 7-12 for the benefit of reversing the encryption, compression and conversion of the broadcast data.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of reversing the encryption, compression and conversion of the broadcast data.

As per Claim 42.

See reasoning applied to claim 41.

11. Claims 39-40, 45-48, 50-51, 53, 57 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang ('932) in view of Yoshio et al ('631) and further in view of in view of Official Notice.

As per Claim 39.

The combination of Lang and Yoshio et al. teaches an analog to digital and digital to analog converters are old and well known, see figure 3 (24, 25), but does not disclose or fairly teach the received data is alphanumeric data and has been converted from analog to digital form.

Official Notice is taken that it is old and well know to convert data from analog to digital, the type of data does not matter, further Atkinson "VCR programming: Making life easier using bar codes" and further Bensch "VPV – Videotext programs videorecorder" teaches use of alpha numerics in vcrs, for the benefit of making vcrs easier to set.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to convert alphanumeric data to digital form for the benefit of easier setting of the vcr.

As per Claim 40.

The combination of Lang and Yoshio et al. teaches an analog to digital and digital to analog converters are old and well known, see figure 3 (24, 25), but does not disclose or fairly teach the received data is alphanumeric data and is converted to voice data by a speech synthesizer.

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Official Notice is taken that it is old and well know to convert data from analog to digital, the type of data does not matter, further it is well know for radios and televisions to have voice for the benefit of listening to the audio portion of the program.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to convert alphanumeric data to digital form and convert voice data by a speech synthesizer for the benefit of listening to the audio portion of the program.

As per Claim 45.

The combination of Lang and Yoshio et al. does not disclose the user interface is voice activated.

Official Notice is taken that speech recognition is old and well know as shown in Takahashi (4,682,368), column 2, lines 11-60 for the benefit of hands free operation of the device.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a voice activated user interface as taught by Takahashi (4,682,368) for the benefit of hands free operation of the device.

As per Claim 46.

The combination of Lang and Yoshio et al. does not disclose:
a manual input device adapted to be mountable on an automobile steering wheel; and a link from the manual input device to the controller.

Official Notice is taken that control systems on automobile steering wheels are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 47.

The combination of Lang and Yoshio et al. does not disclose a control for determining the speed at which the speech output device outputs the analog signal.

Official notice is taken that it is old and well known to determine the speed at which the speech device output the output signal as can be seen in Benbassat et al (4,700,322) column 1, lines 28-50 for the benefit of synchronizing speech with the visualization of messages.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to determine the speed at which the speech device output the output signal as taught by Benbassat et al (4,700,322) for the benefit of synchronizing speech with the visualization of messages.

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As per Claims 48 and 68.

The combination of Lang and Yoshio et al. does not disclose the tuner channel skips to tune to a particular transmitter.

Official Notice is taken that it is old and well known to skip channels to get to the desired transmitter, as seen in Whitby et al (GB 2 258 102) page 6, lines 13-21 for the benefit of presetting the device to access a specific transmitter.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to skip channels to get to the desired transmitter, as taught by Whitby et al (GB 2 258 102) for the benefit of presetting the device to access a specific transmitter.

As per Claim 50.

The combination of Lang and Yoshio et al. does not disclose connecting the receiving system to an automobile radio set.

Official Notice is taken that control systems on automobiles are well known, as seen in Guenther et al (5,086,510) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to mount controls on an automobile steering wheel and link it to the controller for the benefit of better visibility of the controls for the user.

As per Claim 51.

The combination of Lang and Yoshio et al. does not disclose a hierarchy for the database.

Official Notice is taken that hierarchical databases are old and well known, as taught by Date "An introduction to Database Systems" in the database arts for structured storage.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to create a hierarchical database as an old and well known method of structuring a database.

As per Claim 53.

The combination of Lang and Yoshio et al. further discloses a tape medium and various digital media, see column 3, lines 51-56 and column 6, line 28-39, but does not disclose digital audio tape.

Official Notice is taken that it is old and well known to use standardized media for recording for the benefit of maximizing public acceptance of the product.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to utilize digital audio tape or any other standard media for recording for the benefit of maximizing public acceptance of the product.

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As per Claim 57.

The combination of Lang and Yoshio et al. does not disclose a speed of transmission of the data in the broadcast signal is varied to most efficiently use the available bandwidth.

Official Notice is taken that it is old and well known in the network arts to vary transmission speeds to most efficiently use the available bandwidth.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to vary the transmission of the broadcast signal to most efficiently use the available bandwidth.

12. Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang ('932) in view of Yoshio et al ('631), further in view of Rovira (WO 92/10040) and further in view of De Bey ('112).

As per Claim 43.

The combination of Lang, Yoshio et al. and Rovira does not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of increased security of data transmission.

As per Claim 44.

The combination of Lang, Yoshio et al. and Rovira does not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, states that the key can be included as a prefix to the data packet received by the receiver 40, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to decrypt the data transmission for the benefit of increased security of data transmission.

13. Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshio et al ('631) in view of Ryan (US 5,590,195).

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Examiner points out that the effective date of the "stamp" feature recited in claim 63 is 12/18/1996. Furthermore, for the purposes of examination the Examiner understands the phrase "*data stamp*" as "*date stamp*".

As per Claim 63.

Yoshio teaches all the limitations of claim 63, except that received items of data include a data stamp thereby to indicate currency of the data.

Ryan teaches a system for dissemination of information, including a receiver adapted to receive information from a FM subcarrier, wherein data received in the receiver includes a date stamp to indicate to the user the currency of the information (C. 7, L. 63-65).

In this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Thus, such a combination would have yielded predictable results. *See Sakraida*, 425 U.S. at 282, 189 USPQ at 453. Therefore, Supreme Court Decision in *KSR International Co. v. Teleflex Inc.* (KSR, 82 USPQ2d at 1396) forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex arte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007).

14. Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey (WO 99/03112) in view of Yoshio et al ('631) and further in view of Ryan.

As per Claim 63.

De Bey and Yoshio teaches all the limitations of claim 63, except that received items of data include a data stamp thereby to indicate currency of the data.

Ryan teaches a system for dissemination of information, including a receiver adapted to receive information from a FM subcarrier, wherein data received in the receiver includes a date stamp to indicate to the user the currency of the information (C. 7, L. 63-65).

In this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Thus, such a combination would have yielded predictable results. *See Sakraida*, 425 U.S. at 282, 189 USPQ at 453. Therefore, Supreme Court Decision in *KSR International Co. v. Teleflex Inc.* (KSR, 82 USPQ2d at 1396) forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex arte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007).

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15. Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshio et al ('631) in view of Myers et al. (US 5,272,752).

As per Claim 64.

Yoshio teaches all the limitations of claim 64, except that the receiver is adapted to disable itself upon receipt of a command received via the tuner.

Myers teaches an authorization code lockout mechanism for preventing unauthorized reception of transmitted data, wherein a valid receiver is adapted to receive an addressed transaction which gives the receiver the current "authorization code". After this command has been sent to the receiver, a global transaction is sent to the receiver containing the current and previous authorization codes. If the receiver receiving this transaction does not find a match between its stored authorization code and either of the transmitted authorization codes, it will disable itself (C. 2, L. 25-40).

In this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Thus, such a combination would have yielded predictable results. See *Sakraida*, 425 U.S. at 282, 189 USPQ at 453. Therefore, Supreme Court Decision in *KSR International Co. v. Teleflex Inc.* (KSR, 82 USPQ2d at 1396) forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex arte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007).

16. Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey (WO 99/03112) in view of Yoshio et al ('631) and further in view of Myers et al.

As per Claim 64.

De Bey and Yoshio teaches all the limitations of claim 64, except that the receiver is adapted to disable itself upon receipt of a command received via the tuner.

Myers teaches an authorization code lockout mechanism for preventing unauthorized reception of transmitted data, wherein a valid receiver is adapted to receive an addressed transaction which gives the receiver the current "authorization code". After this command has been sent to the receiver, a global transaction is sent to the receiver containing the current and previous authorization codes. If the receiver receiving this transaction does not find a match between its stored authorization code and either of the transmitted authorization codes, it will disable itself (C. 2, L. 25-40).

In this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Thus, such a combination would have yielded predictable results. See *Sakraida*, 425 U.S. at 282, 189 USPQ at 453. Therefore, Supreme Court Decision in *KSR International Co. v. Teleflex Inc.* (KSR, 82 USPQ2d at 1396) forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex arte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007).

Response to Arguments

Applicant's arguments filed 02/07/2008 have been fully considered but they are not persuasive.

In response to applicant's argument that Yoshio does not teach a receiver, it is noted that Yoshio discloses receiving equipment at page 23, line 12.

In response to applicant's argument that Yoshio does not teach a user interface, it is noted that Yoshio discloses presentation items via a menu and submenus, see page 23, lines 25-27.

In response to applicant's argument that Yoshio does not teach a memory, it is noted that recording functionality is disclosed at page 23, line 13.

In response to applicant's argument that Yoshio does not teach a speech producing sub-system coupled to the controller and the memory of the claimed receiver, it is noted that Yoshio teaches a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 23, lines 21-23.

In response to applicant's argument that Yoshio is not enabling, the examiner stipulates that prior art (including publications) does not *have* to be enabled to teach the inventive features. Apparently Applicant confuses the Scope of Enablement under 35 USC § 112 (1) (enabling requirements to the Specification of the patent application) with the teaching of the prior art.

In response to applicant's argument that the invention had commercial success, the examiner points out that evidence of secondary consideration is not applicable to Claim Rejections under 35 USC 102:

2131.04 Secondary Considerations

Evidence of secondary considerations, such as unexpected results or commercial success, is irrelevant to 35 U.S.C. 102 rejections and thus cannot overcome a rejection so based. *In re Wiggins*, 488 F.2d 538, 543, 179 USPQ 421, 425 (CCPA 1973).

The remaining applicant's arguments regarding Claim Rejections under 35 USC 103 essentially repeat the arguments presented above; therefore, the responses presented by the examiner above are equally applicable to the remaining applicant's arguments.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Igor N. Borissov/
Primary Examiner, Art Unit 3628
07/07/2008